Data Validation Checklist Semivolatile Organic Analyses

Project:	35 TH Avenue Superfund Site	Project No:	15268508.2	.0000
Laboratory:	TestAmerica – Tampa, FL	Job ID.:	680-87218-	2
Method:	SW-846 8270C Low-Level (PAH)	Associated Samp	es: Re	fer to Attachment A (Sample Summary)
Matrix:	Soil	Date(s) Collected	: 02/	/05/2013
Reviewer:	Jane Lindsey	Date:	02/27/2013	
Concurrence ¹ :	Carol Lovett, Martha Meyers-Lee	Date:	03/27/2013	

	Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1.	Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	√				
2.	Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3.	Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		√			
4.	Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5.	Were holding times met (\leq 7 and 14 days from collection to extraction for aqueous and solid samples, respectively; \leq 40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	√				
6.	Were results for all project-specified target analytes reported?	\				
7.	Were project-specified Reporting Limits achieved for undiluted sample analyses?	√				
8.	Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			√		
9.	Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10.	Were target analytes detected in the method blank?		✓			
11.	Were target analytes detected in equipment/rinsate blanks?		√		PAHs were not detected during the analysis of rinsate blank 020513-RB-Bowls+Spoons (680-87170-29).	
12.	Are equipment/rinsate blanks associated with every sample? If	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which	

¹ Independent technical reviewer URS Group, Inc. Page 1 of 4

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
no, note in DV report.				occurs once per week per the client. A rinsate blank (020513-RB-Bowls+Spoons) was collected during the week of 02/04/2013. The rinsate blank was analyzed for PAHs under Test America Job ID 680-87170-2.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			√	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			CV0439A-CS and CV0439A-CSD (680-87218-35 and 680-87218-36)	
15. Was precision deemed acceptable as defined by the project plans?	✓			Refer to Attachment B (Evaluation of Field Duplicate Results	
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
 18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. An initial calibration is to be associated with each sample analysis. 	√			 Initial Calibration: 01/30/2013, instrument BSMA5973 ICV: 01/30/2013 @13:35 CCV: 02/14/2013 @10:21 	
• A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument.					
 19. Were calibration results within laboratory/project specifications? ICAL (Criteria: ≤15 mean %RSD with no individual CCC %RSD ≤30 (≤50% for poor performers), OR r≥0.995, OR r²≥0.99, and RRF ≥0.050 (≥0.010 for poor performers)): If %RSD>15 (>50% for poor performers), or r <0.995, or r² <0.995, then J-flag positive results and UJ-flag non-detects If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects ICV and CCV (Criteria: ≤20%D (≤50% for poor 		V		ICV of 01/30/13 @ 13:35, instrument BSMA5973: 2-Methylnaphthalene @23.7 %D (Lab: ≤35, Project: ≤20). Positive bias is indicated by the CCV percent difference; therefore, J flag detected 2-methyl naphthalene results.	1

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
performers) and RF ≥0.050 (≥0.010 for poor performers)): o If %D>20 (>50% for poor performers), then J-flag positive results and UJ-flag non-detects o If RF <0.050 (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds					
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R >Upper Control Limit (UCL) and J/R-flag results when %R <lower (lcl).<="" control="" limit="" td=""><td>*</td><td></td><td></td><td></td><td></td></lower>	*				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects		✓		LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	√			Prep Batch 134426: 680-87218-22 (CV0748J-CS), MS/MSD	
 25. Were MS/MSD recoveries within laboratory/project specifications? Only QC results for project samples are evaluated. If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If either MS or MSD recovery meets control limits, qualification of data is not warranted. MS and MSD %R<10: J and R Flag positive and ND results, respectively MS and MSD %R >10 and <lcl: and="" j-flag="" li="" non-detect="" positive="" results<="" uj-flag=""> MS and MSD R% >UCL (or 140): J-Flag positive results </lcl:>	V				
 26. Were laboratory criteria met for precision during the MS/MSD analysis? Only QC results for project samples are evaluated. If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J-flag positive result and UJ-flag non-detect result 	✓				
 27. Were surrogate recoveries within lab/project specifications? If %R <10, then J-flag positive and R-flag non-detect associated sample results If %R >UCL, then J-flag positive results 	√				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
 %R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> If 1 %R >UCL and 1 %R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> </lcl,></lcl,>					
 28. Were internal standard (IS) results within lab/project specifications? If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 	•				
29. Were lab comments included in report?	✓			Refer to Attachment C (Case Narrative)	

Comments: The data validation was conducted in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012). The data review process was modeled after the USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review (EPA, October 1999) and USEPA CLP NFG for Low Concentration Organic Methods Data Review (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment D). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

CV0673B-CS

680-87218-40

TestAmerica Job ID: 680-87218-2

02/05/13 13:23

SDG: 68087218-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87218-21	CV0748I-CS	Solid	02/05/13 13:00	02/07/13 10:42
680-87218-22	CV0748J-CS	Solid	02/05/13 13:18	02/07/13 10:42
680-87218-23	CV0748K-CS	Solid	02/05/13 13:22	02/07/13 10:42
680-87218-24	CV0748L-CS	Solid	02/05/13 13:29	02/07/13 10:42
680-87218-25	CV0748M-CS	Solid	02/05/13 13:31	02/07/13 10:42
680-87218-26	CV0748N-CS	Solid	02/05/13 13:33	02/07/13 10:42
680-87218-27	CV0748O-CS	Solid	02/05/13 13:37	02/07/13 10:42
680-87218-28	CV0748P-CS	Solid	02/05/13 14:43	02/07/13 10:42
680-87218-29	CV0748Q-CS	Solid	02/05/13 14:42	02/07/13 10:42
680-87218-30	CV0748R-CS	Solid	02/05/13 14:59	02/07/13 10:42
680-87218-31	CV0748S-CS	Solid	02/05/13 15:07	02/07/13 10:42
680-87218-32	CV0748T-CS	Solid	02/05/13 15:19	02/07/13 10:42
680-87218-33	CV0748U-CS	Solid	02/05/13 15:22	02/07/13 10:42
680-87218-34	CV0748V-CS	Solid	02/05/13 15:30	02/07/13 10:42
680-87218-35	CV0439A-CS	Solid	02/05/13 12:30	02/07/13 10:42
680-87218-36	CV0439A-CSD	Solid	02/05/13 12:33	02/07/13 10:42
680-87218-37	CV0439B-CS	Solid	02/05/13 12:37	02/07/13 10:42
680-87218-38	CV0467A-CS	Solid	02/05/13 14:14	02/07/13 10:42
680-87218-39	CV0673A-CS	Solid	02/05/13 13:18	02/07/13 10:42

Solid

02/07/13 10:42

ATTACHMENT B EVALUATION OF FIELD DUPLICATE RESULTS

	CV0439A-CS		CV0439A-CSD			Avg.		Absolute	2x Avg	
Analyte	(680-87218-35)	RL	(680-87218-36)	RL	Unit	RLx5	RPD	difference	RL	Action
Anthracene	U	9.5	6.9 J	9.5	μg/kg	47.5	NA	6.9	19	None, absolute difference $\leq 2x$ Avg RL
Benzo(a)anthracene	21	9.0	37	9.1	μg/kg	45.25	NA	16	18.1	None, absolute difference $\leq 2x$ Avg RL
Benzo(a)pyrene	12	12	19	12	μg/kg	60	NA	7	24	None, absolute difference $\leq 2x$ Avg RL
Benzo(b)fluoranthene	18	14	29	14	μg/kg	70	NA	11	28	None, absolute difference $\leq 2x$ Avg RL
Benzo(g,h,i)perylene	11 J	23	21 J	23	μg/kg	115	NA	10	46	None, absolute difference $\leq 2x$ Avg RL
Benzo(k)fluoranthene	7.3 J	9.0	14	9.1	μg/kg	45.25	NA	6.7	18.1	None, absolute difference $\leq 2x$ Avg RL
Chrysene	16	10	22	10	μg/kg	50	NA	6	20	None, absolute difference $\leq 2x$ Avg RL
Dibenzo(a,h)anthracene	U	23	6.0 J	23	μg/kg	115	NA	6	46	None, absolute difference $\leq 2x$ Avg RL
Fluoranthene	20 J	23	42	23	μg/kg	115	NA	22	46	None, absolute difference $\leq 2x$ Avg RL
Indeno(1,2,3-cd)pyrene	9.9 J	23	19 J	23	μg/kg	115	NA	9.1	46	None, absolute difference $\leq 2x$ Avg RL
1-Methylnaphthalene	12 J	45	14 J	45	μg/kg	225	NA	2	90	None, absolute difference $\leq 2x$ Avg RL
2-Methylnaphthalene	35 J	45	32 J	45	μg/kg	225	NA	3	90	None, absolute difference $\leq 2x$ Avg RL
Naphthalene	31 J	45	27 J	45	μg/kg	225	NA	4	90	None, absolute difference $\leq 2x$ Avg RL
Phenanthrene	18	9.0	33	9.1	μg/kg	45.25	NA	15	18.1	None, absolute difference $\leq 2x$ Avg RL
Pyrene	20 J	23	38	23	μg/kg	115	NA	18	46	None, absolute difference $\leq 2x$ Avg RL

Note: If the analyte was not detected, then the cell was left blank.

μg/kg - micrograms per kilogram

J - Estimated value

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

U - Not detected above the method detection limit

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C

CASE NARRATIVE

Case Narrative

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Job ID: 680-87218-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-87218-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

The samples were received on 02/07/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.6 C.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV0748I-CS (680-87218-21), CV0748J-CS (680-87218-22), CV0748K-CS (680-87218-23), CV0748L-CS (680-87218-24), CV0748M-CS (680-87218-25), CV0748N-CS (680-87218-26), CV0748O-CS (680-87218-27), CV0748P-CS (680-87218-28), CV0748Q-CS (680-87218-29), CV0748R-CS (680-87218-30), CV0748S-CS (680-87218-31), CV0748T-CS (680-87218-32), CV0748U-CS (680-87218-33), CV0748V-CS (680-87218-34), CV0439A-CS (680-87218-35), CV0439A-CSD (680-87218-36), CV0439B-CS (680-87218-37), CV0467A-CS (680-87218-38), CV0673A-CS (680-87218-39) and CV0673B-CS (680-87218-40) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/13/2013 and analyzed on 02/14/2013.

No difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All quality control parameters were within the acceptance limits.

ATTACHMENT D QUALIFIED SAMPLE RESULTS

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Client Sample ID: CV0748I-CS

Date Collected: 02/05/13 13:00 Date Received: 02/07/13 10:42 Lab Sample ID: 680-87218-21

Matrix: Solid	2004
Percent Solids: 78.5	07.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	130	U	130	25	ug/Kg	₩	02/13/13 10:32	02/14/13 11:22	1
Acenaphthylene	6.6	J	51	6.3	ug/Kg	₩	02/13/13 10:32	02/14/13 11:22	1
Anthracene	17		11	5.3		₽	02/13/13 10:32	02/14/13 11:22	1
Benzo[a]anthracene	110	701 100	10	4.9	ug/Kg	☼	02/13/13 10:32	02/14/13 11:22	1
Benzo[a]pyrene	74		13	6.6	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
Benzo[b]fluoranthene	120		15	7.7	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
Benzo[g,h,i]perylene	64		25	5.6	ug/Kg	口口	02/13/13 10:32	02/14/13 11:22	1
Benzo[k]fluoranthene	41		10	4.6	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
Chrysene	110		11	5.7	ug/Kg	₩	02/13/13 10:32	02/14/13 11:22	1
Dibenz(a,h)anthracene	19	J	25	5.2	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
Fluoranthene	160		25	5.1	ug/Kg	₩	02/13/13 10:32	02/14/13 11:22	1
Fluorene	6.3	J	25	5.2	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
Indeno[1,2,3-cd]pyrene	63		25	9.0	ug/Kg	\$	02/13/13 10:32	02/14/13 11:22	1
1-Methylnaphthalene	25	J	51	5.6	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
2-Methylnaphthalene	39	∦ J	51	9.0	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
Naphthalene	30	J	51	5.6	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
Phenanthrene	96		10	4.9	ug/Kg	尊	02/13/13 10:32	02/14/13 11:22	1
Pyrene	160		25	4.7	ug/Kg	₽	02/13/13 10:32	02/14/13 11:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenvi	71	-	30 - 130				02/13/13 10:32	02/14/13 11:22	1

Client Sample ID: CV0748J-CS

Date Collected: 02/05/13 13:18

Date Received: 02/07/13 10:42

Lab Sample ID: 680-87218-22

Matrix: Solid Percent Solids: 83.3

Analyte	Result	Qualifler	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	120	Ū	120	24	ug/Kg	**	02/13/13 10:32	02/14/13 11:37	1
Acenaphthylene	48	U	48	6.0	ug/Kg	₽	02/13/13 10:32	02/14/13 11:37	1
Anthracene	13		10	5.0	ug/Kg	₩	02/13/13 10:32	02/14/13 11:37	1
Benzo[a]anthracene	85		9.6	4,7	ug/Kg	₽	02/13/13 10:32	02/14/13 11:37	1
Benzo[a]pyrene	59		12	6.2	ug/Kg	尊	02/13/13 10:32	02/14/13 11:37	1
Benzo[b]fluoranthene	91		15	7.3	ug/Kg	₩	02/13/13 10:32	02/14/13 11:37	1
Benzo[g,h,i]perylene	64		24	5.3	ug/Kg	*	02/13/13 10:32	02/14/13 11:37	1
Benzo[k]fluoranthene	48		9.6	4.3	ug/Kg	₽	02/13/13 10:32	02/14/13 11:37	1
Chrysene	85		11	5.4	ug/Kg	₩	02/13/13 10:32	02/14/13 11:37	1
Dibenz(a,h)anthracene	19	J	24	4.9	ug/Kg	₽	02/13/13 10:32	02/14/13 11:37	1
Fluoranthene	180		24	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 11:37	1
Fluorene	24	U	24	4.9	ug/Kg	₽	02/13/13 10:32	02/14/13 11:37	1
Indeno[1,2,3-cd]pyrene	57		24	8.5	ug/Kg	₩	02/13/13 10:32	02/14/13 11:37	1
1-Methylnaphthalene	5.8	J Q *	48	5.3	ug/Kg	₩	02/13/13 10:32	02/14/13 11:37	1
2-Methylnaphthalene	48	U	48	8.5	ug/Kg	☆	02/13/13 10:32	02/14/13 11:37	1
Naphthalene	7.5	J	48	5.3	ug/Kg	☆	02/13/13 10:32	02/14/13 11:37	1
Phenanthrene	110		9.6	4.7	ug/Kg	₩	02/13/13 10:32	02/14/13 11:37	1
Pyrene	150		24	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 11:37	1
Surrogate	%Recovery	Qualifier	Limits		-		Prepared	Analyzed *	Dil Fac
o-Terphenyl	72		30 - 130				02/13/13 10:32	02/14/13 11:37	1

* Flagging error, M Meyers-Lee, 3/27/2013

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Client Sample ID: CV0748K-CS

Date Collected: 02/05/13 13:22

Date Received: 02/07/13 10:42

Lab Sample ID: 680-87218-23

02/13/13 10:32 02/14/13 12:22

Percent Solids: 93.1

Matrix: Solid

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	100	U	100	21	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
Acenaphthylene	8.0	J	42	5.2	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
Anthracene	16		8.8	4.4	ug/Kg	≎	02/13/13 10:32	02/14/13 12:22	1
Benzo[a]anthracene	73		8.3	4.1	ug/Kg	☆	02/13/13 10:32	02/14/13 12:22	1
Benzo[a]pyrene	52		11	5.4	ug/Kg	☆	02/13/13 10:32	02/14/13 12:22	1
Benzo[b]fluoranthene	82		13	6.4	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
Benzo[g,h,i]perylene	58		21	4.6	ug/Kg	☆	02/13/13 10:32	02/14/13 12:22	1
Benzo[k]fluoranthene	26		8.3	3.8	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
Chrysene	65		9.4	4.7	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
Dibenz(a,h)anthracene	18	J	21	4.3	ug/Kg	☆	02/13/13 10:32	02/14/13 12:22	1
Fluoranthene	89		21	4.2	ug/Kg	₽	02/13/13 10:32	02/14/13 12:22	1
Fluorene	4.6	J	21	4.3	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
Indeno[1,2,3-cd]pyrene	53		21	7.4	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
1-Methylnaphthalene	27	J	42	4.6	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
2-Methylnaphthalene	29	Х J	42	7.4	ug/Kg	₽	02/13/13 10:32	02/14/13 12:22	1
Naphthalene	26	J	42	4.6	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
Phenanthrene	60		8.3	4.1	ug/Kg	☆	02/13/13 10:32	02/14/13 12:22	1
Pyrene	93		21	3.9	ug/Kg	₩	02/13/13 10:32	02/14/13 12:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Client Sample ID: CV0748L-CS

o-Terphenyl

Lab Sample ID: 680-87218-24 Date Collected: 02/05/13 13:29

30 - 130

66

Matrix: Solid Percent Solids: 92.8 Date Received: 02/07/13 10:42

Analyte	Result	Qualifler	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	110	Ū	110	22	ug/Kg	以	02/13/13 10:32	02/14/13 12:38	1
Acenaphthylene	24	J	43	5,4	ug/Kg	₩	02/13/13 10:32	02/14/13 12:38	1
Anthracene	33		9.1	4.6	ug/Kg	₩	02/13/13 10:32	02/14/13 12:38	1
Benzo[a]anthracene	150		8.7	4.2	ug/Kg	₩	02/13/13 10:32	02/14/13 12:38	1
Benzo[a]pyrene	100		11	5.6	ug/Kg	₽	02/13/13 10:32	02/14/13 12:38	1
Benzo[b]fluoranthene	160		13	6.6	ug/Kg	✡	02/13/13 10:32	02/14/13 12:38	1
Benzo[g,h,i]perylene	130		22	4.8	ug/Kg	ø	02/13/13 10:32	02/14/13 12:38	1
Benzo[k]fluoranthene	68		8.7	3.9	ug/Kg	≎	02/13/13 10:32	02/14/13 12:38	1
Chrysene	140		9.8	4.9	ug/Kg	≎	02/13/13 10:32	02/14/13 12:38	1
Dibenz(a,h)anthracene	35		22	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 12:38	1
Fluoranthene	230		22	4.3	ug/Kg	₩	02/13/13 10:32	02/14/13 12:38	1
Fluorene	5.2	J	22	4.4	ug/Kg	**	02/13/13 10:32	02/14/13 12:38	1
Indeno[1,2,3-cd]pyrene	110		22	7.7	ug/Kg	₩	02/13/13 10:32	02/14/13 12:38	1
1-Methylnaphthalene	42	J	43	4.8	ug/Kg	₩.	02/13/13 10:32	02/14/13 12:38	1
2-Methylnaphthalene	51	J	43	7.7	ug/Kg	₽	02/13/13 10:32	02/14/13 12:38	1
Naphthalene	42	J	43	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 12:38	1
Phenanthrene	97		8.7	4.2	ug/Kg	₽	02/13/13 10:32	02/14/13 12:38	1
Pyrene	240		22	4.0	ug/Kg	₩	02/13/13 10:32	02/14/13 12:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		30 - 130				02/13/13 10:32	02/14/13 12:38	1

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Mathod: 8270C LL - Samiyolatile Organic Compounds by GCMS - Low Levels

69

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Client Sample ID: CV0748M-CS

Date Collected: 02/05/13 13:31 Date Received: 02/07/13 10:42 Lab Sample ID: 680-87218-25

Matrix: Solid

Percent Solids: 99.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	98	Ū	98	20	ug/Kg	菜	02/13/13 10:32	02/14/13 12:53	1
Acenaphthylene	68		39	4.9	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Anthracene	98		8.2	4.1	ug/Kg	☆	02/13/13 10:32	02/14/13 12:53	1
Benzo[a]anthracene	320		7.9	3.8	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Benzo[a]pyrene	240		10	5.1	ug/Kg	❖	02/13/13 10:32	02/14/13 12;53	1
Benzo[b]fluoranthene	360		12	6.0	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Benzo[g,h,i]perylene	240		20	4.3	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Benzo[k]fluoranthene	180		7.9	3.5	ug/Kg	₽	02/13/13 10:32	02/14/13 12:53	1
Chrysene	340		8.8	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 12:53	1
Dibenz(a,h)anthracene	78		20	4.0	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Fluoranthene	420		20	3.9	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Fluorene	18	J	20	4.0	ug/Kg	₽	02/13/13 10:32	02/14/13 12:53	1
Indeno[1,2,3-cd]pyrene	210		20	7.0	ug/Kg	☆	02/13/13 10:32	02/14/13 12:53	1
1-Methylnaphthalene	85		39	4.3	ug/Kg	☆	02/13/13 10:32	02/14/13 12:53	1
2-Methylnaphthalene	110	J	39	7.0	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Naphthalene	73		39	4.3	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Phenanthrene	300		7.9	3.8	ug/Kg	₽	02/13/13 10:32	02/14/13 12:53	1
Pyrene	370		20	3.6	ug/Kg	₩	02/13/13 10:32	02/14/13 12:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

30 - 130

Client Sample ID: CV0748N-CS

Date Collected: 02/05/13 13:33 Date Received: 02/07/13 10:42

o-Terphenvl

Lab Sample ID: 680-87218-26

02/14/13 12:53

02/13/13 10:32

Matrix: Solid Percent Solids: 88.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels Analyzed DII Fac Analyte Result Qualifler RL MDL Unit D Prepared ₩ Acenaphthene 110 U 110 22 ug/Kg 02/13/13 10:32 02/14/13 13:08 44 ₩ 02/13/13 10:32 02/14/13 13:08 12 J 5.6 ug/Kg Аселарhthylene ₽ 9,3 ug/Kg 02/13/13 10:32 02/14/13 13:08 4.7 Anthracene 29 \Diamond 02/13/13 10:32 02/14/13 13:08 8.9 ug/Kg Benzo[a]anthracene 130 4.3 ₩ 12 ug/Kg 02/13/13 10:32 02/14/13 13:08 Benzo[a]pyrene 88 ₩ 14 02/13/13 10:32 02/14/13 13:08 Benzo[b]fluoranthene 130 ug/Kg # 02/13/13 10:32 02/14/13 13:08 22 4.9 ug/Kg 100 Benzo[g,h,i]perylene ug/Kg 02/13/13 10:32 02/14/13 13:08 8.9 Benzo[k]fluoranthene 49 4.0 ₽ 02/13/13 10:32 02/14/13 13:08 Chrysene 120 10 5.0 ug/Kg ₩ Dibenz(a,h)anthracene 36 22 ug/Kg 02/13/13 10:32 02/14/13 13:08 22 ₩ 02/13/13 10:32 02/14/13 13:08 Fluoranthene 160 ug/Kg 9.6 J 22 ug/Kg 02/13/13 10:32 02/14/13 13:08 4.6 Fluorene 22 ug/Kg ₽ 02/13/13 10:32 02/14/13 13:08 Indeno[1,2,3-cd]pyrene 88 7.9 32 J 44 ug/Kg ₽ 02/13/13 10:32 02/14/13 13:08 1-Methylnaphthalene 2-Methylnaphthalene 38 🖌 44 ug/Kg ₩ 02/13/13 10:32 02/14/13 13:08 31 J 44 4.9 ug/Kg ø 02/13/13 10:32 02/14/13 13:08 Naphthalene 98 8.9 4.3 ua/Ka 02/13/13 10:32 02/14/13 13:08 Phenanthrene 02/13/13 10:32 Pyrene 150 22 4.1 ug/Kg 02/14/13 13:08 Limits Prepared Analyzed DII Fac Surrogate %Recovery Qualifier o-Terphenyl 75 30 - 130 02/13/13 10:32 02/14/13 13:08

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Client Sample ID: CV0748O-CS

Date Collected: 02/05/13 13:37

Date Received: 02/07/13 10:42

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Lab Sample ID: 680-87218-27

Matrix: Solid

Percent Solids: 86.5

		7	
1			

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Analyte	Result	Qualifler	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	110	Ū	110	23	ug/Kg	Þ	02/13/13 10:32	02/14/13 13:23	1
Acenaphthylene	7.0	J	45	5.7	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	্ৰ
Anthracene	7.1	J	9.5	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
Benzo[a]anthracene	44		9.1	4.4	ug/Kg	≎	02/13/13 10:32	02/14/13 13:23	1
Benzo[a]pyrene	30		12	5.9	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
Benzo[b]fluoranthene	38		14	6.9	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
Benzo[g,h,i]perylene	37		23	5.0	ug/Kg	*	02/13/13 10:32	02/14/13 13:23	1
Benzo[k]fluoranthene	15		9.1	4.1	ug/Kg	₿	02/13/13 10:32	02/14/13 13:23	1
Chrysene	41		10	5.1	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
Dibenz(a,h)anthracene	11	J	23	4.6	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
Fluoranthene	57		23	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	-1
Fluorene	23	U	23	4.6	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
Indeno[1,2,3-cd]pyrene	26		23	8.0	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	-1
1-Methylnaphthalene	12	J	45	5.0	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
2-Methylnaphthalene	12	J J	45	8.0	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
Naphthalene	9.4	J	45	5.0	ug/Kg	₽	02/13/13 10:32	02/14/13 13:23	1
Phenanthrene	23		9.1	4.4	ug/Kg	₩	02/13/13 10:32	02/14/13 13:23	1

Limits

30 - 130

4.2 ug/Kg

Client Sample ID: CV0748P-CS

Date Collected: 02/05/13 14:43

Pyrene

Surrogate

o-Terphenyl

Date Received: 02/07/13 10:42

%Recovery Qualifier

79

Lab Sample ID: 680-87218-28

02/14/13 13:23

Analyzed

02/14/13 13:23

02/13/13 10:32

Prepared

02/13/13 10:32

Matrix: Solid Percent Solids: 83.7

DII Fac

Analyte	Result	Qualifler	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	120	U	120	23	ug/Kg	*	02/13/13 10:32	02/14/13 13:38	1
Acenaphthylene	47	U	47	5.8	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Anthracene	8.5	J	9.8	4.9	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Benzo[a]anthracene	39		9.3	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Benzo[a]pyrene	25		12	6.0	ug/Kg	₩	02/13/13 10:32	02/14/13 13:38	1
Benzo[b]fluoranthene	35		14	7.1	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Benzo[g,h,i]perylene	30		23	5.1	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Benzo[k]fluoranthene	23		9.3	4.2	ug/Kg	≎	02/13/13 10:32	02/14/13 13:38	1
Chrysene	31		10	5.2	ug/Kg	≎	02/13/13 10:32	02/14/13 13:38	1
Dibenz(a,h)anthracene	7.9	J	23	4.8	ug/Kg	≎	02/13/13 10:32	02/14/13 13:38	1
Fluoranthene	48		23	4.7	ug/Kg	ø	02/13/13 10:32	02/14/13 13:38	1
Fluorene	23	U	23	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Indeno[1,2,3-cd]pyrene	20	J	23	8.3	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
1-Methylnaphthalene	8.3	J	47	5.1	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
2-Methylnaphthalene	11	J J	47	8.3	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Naphthalene	8.6	J	47	5.1	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Phenanthrene	27		9.3	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 13:38	1
Pyrene	47		23	4.3	ug/Kg	₩	02/13/13 10:32	02/14/13 13:38	1
Surrogate	%Recovery	Qualifler	Limits				Prepared	Analyzed	DII Fac
o-Terphenyl	70	-	30 - 130				02/13/13 10:32	02/14/13 13:38	1

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

2

Client Sample ID: CV0748Q-CS

Date Collected: 02/05/13 14:42 Date Received: 02/07/13 10:42 Lab Sample ID: 680-87218-29

Matrix: Solid

Percent Solids: 87.1

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	110	U	110	23	ug/Kg	\tilde{\pi}	02/13/13 10:32	02/14/13 13:53	1
Acenaphthylene	9.0	J	45	5.7	ug/Kg	**	02/13/13 10:32	02/14/13 13:53	1
Anthracene	13		9.6	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 13:53	1
Benzo[a]anthracene	50		9.1	4.4	ug/Kg	₩	02/13/13 10:32	02/14/13 13:53	1
Benzo[a]pyrene	34		12	5.9	ug/Kg	₩	02/13/13 10:32	02/14/13 13:53	1
Benzo[b]fluoranthene	53		14	6.9	ug/Kg	₽	02/13/13 10:32	02/14/13 13:53	1
Benzo[g,h,i]perylene	28		23	5.0	ug/Kg	₩	02/13/13 10:32	02/14/13 13:53	-1
Benzo[k]fluoranthene	18		9.1	4.1	ug/Kg	₩	02/13/13 10:32	02/14/13 13:53	-1
Chrysene	43		10	5.1	ug/Kg	₩	02/13/13 10:32	02/14/13 13:53	1
Dibenz(a,h)anthracene	12	J	23	4.7	ug/Kg	₩	02/13/13 10:32	02/14/13 13:53	1
Fluoranthene	61		23	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 13:53	1
Fluorene	23	U	23	4.7	ug/Kg	≎	02/13/13 10:32	02/14/13 13:53	1
Indeno[1,2,3-cd]pyrene	26		23	8.1	ug/Kg	☆	02/13/13 10:32	02/14/13 13:53	1
1-Methylnaphthalene	11	J	45	5.0	ug/Kg	₩.	02/13/13 10:32	02/14/13 13:53	1
2-Methylnaphthalene	12	∦ J	45	8,1	ug/Kg	₩	02/13/13 10:32	02/14/13 13:53	1
Naphthalene	12	J	45	5.0	ug/Kg	₽	02/13/13 10:32	02/14/13 13:53	1
Phenanthrene	33		9.1	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 13:53	1
Pyrene	58		23	4.2	ug/Kg	☆	02/13/13 10:32	02/14/13 13:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

30 - 130

81

Client Sample ID: CV0748R-CS

Date Collected: 02/05/13 14:59

o-Terphenyl

Date Received: 02/07/13 10:42

Lab Sample ID: 680-87218-30

02/14/13 13:53

02/13/13 10:32

Matrix: Solid Percent Solids: 88.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte # 110 U Acenaphthene 110 23 ug/Kg 02/13/13 10:32 02/14/13 14:08 Acenaphthylene 13 J 45 ug/Kg # 02/13/13 10:32 02/14/13 14:08 9.5 ₽ 02/13/13 10:32 02/14/13 14:08 Anthracene 14 4.7 ug/Kg 9.0 ug/Kg 02/13/13 10:32 02/14/13 14:08 Benzo[a]anthracene 4.4 64 02/13/13 10:32 Benzo[a]pyrene 44 12 5.9 ug/Kg 02/14/13 14:08 Benzo[b]fluoranthene 65 14 6.9 ug/Kg 02/13/13 10:32 02/14/13 14:08 23 ug/Kg 02/13/13 10:32 02/14/13 14:08 Benzo[g,h,i]perylene 41 5.0 ₽ 9.0 02/13/13 10:32 02/14/13 14:08 Benzo[k]fluoranthene 35 4.1 ua/Ka ₩ 02/13/13 10:32 02/14/13 14:08 10 Chrysene 53 ug/Kg ₩ 23 02/13/13 10:32 02/14/13 14:08 Dibenz(a,h)anthracene 18 J ug/Kg 23 ug/Kg ₩ 02/13/13 10:32 02/14/13 14:08 Fluoranthene 70 ₩ 02/13/13 10:32 Fluorene 23 U 23 4.6 ug/Kg 02/14/13 14:08 23 02/13/13 10:32 02/14/13 14:08 8.0 ug/Kg Indeno[1,2,3-cd]pyrene 35 ₩ 45 02/13/13 10:32 02/14/13 14:08 1-Methylnaphthalene 14 J 5.0 ug/Kg ## 2-Methylnaphthalene 16 🔏 45 8.0 ug/Kg 02/13/13 10:32 02/14/13 14:08 45 ug/Kg 02/13/13 10:32 02/14/13 14:08 Naphthalene 11 5.0 ₩ Phenanthrene 9.0 ug/Kg 02/13/13 10:32 02/14/13 14:08 1 35 4.4 23 02/13/13 10:32 02/14/13 14:08 75 4.2 ug/Kg 1 Pyrene Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac o-Terphenyl 82 30 - 130 02/13/13 10:32 02/14/13 14:08

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Client Sample ID: CV0748S-CS

Lab Sample ID: 680-87218-31

Matrix: Solid

Date Collected: 02/05/13 15:07 Date Received: 02/07/13 10:42

Percent Solids: 91.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	110	Ü	110	22	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	- 1
Acenaphthylene	89		44	5.5	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	-1
Anthracene	90		9.2	4.6	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Benzo[a]anthracene	400		8.8	4.3	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	4
Benzo[a]pyrene	320		11	5.7	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Benzo[b]fluoranthene	500		13	6.7	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Benzo[g,h,i]perylene	320		22	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Benzo[k]fluoranthene	160		8.8	3.9	ug/Kg	☆	02/13/13 10:32	02/14/13 14:23	1
Chrysene	400		9.9	4.9	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	- 1
Dibenz(a,h)anthracene	93		22	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Fluoranthene	520		22	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Fluorene	14	J	22	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Indeno[1,2,3-cd]pyrene	280		22	7.8	ug/Kg	₿	02/13/13 10:32	02/14/13 14:23	1
1-Methylnaphthalene	69		44	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
2-Methylnaphthalene	83	J	44	7.8	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Naphthalene	62	1011 00000 11	44	4.8	ug/Kg	₩	02/13/13 10:32	02/14/13 14:23	1
Phenanthrene	280		8.8	4.3	ug/Kg	₽	02/13/13 10:32	02/14/13 14:23	1
Pyrene	490		22	4.0	ug/Kg	☼	02/13/13 10:32	02/14/13 14:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	62	-	30 - 130				02/13/13 10:32	02/14/13 14:23	1

Client Sample ID: CV0748T-CS

Lab Sample ID: 680-87218-32

Date Collected: 02/05/13 15:19 Date Received: 02/07/13 10:42

o-Terphenyl

Matrix: Solid Percent Solids: 84.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels Result Qualifler MDL Unit D Prepared Analyzed DII Fac Analyte # 120 U 120 02/13/13 10:32 02/14/13 14:38 Acenaphthene 24 ug/Kg ₽ 47 02/13/13 10:32 02/14/13 14:38 ug/Kg Acenaphthylene 10 J 5.9 ₽ Anthracene 30 10 5.0 ug/Kg 02/13/13 10:32 02/14/13 14:38 Ø Benzo[a]anthracene 190 9.5 ug/Kg 02/13/13 10:32 02/14/13 14:38 12 * 02/13/13 10:32 02/14/13 14:38 100 6.2 ug/Kg Benzo[a]pyrene 14 7.2 ug/Kg 02/13/13 10:32 02/14/13 14:38 160 Benzo[b]fluoranthene 02/13/13 10:32 02/14/13 14:38 24 5.2 ug/Kg Benzo[g,h,i]perylene 87 ₽ 72 9.5 4.3 ug/Kg 02/13/13 10:32 02/14/13 14:38 Benzo[k]fluoranthene 170 11 ug/Kg 02/13/13 10:32 02/14/13 14:38 Chrysene 24 4.9 ug/Kg 02/13/13 10:32 02/14/13 14:38 35 Dibenz(a,h)anthracene 24 ug/Kg 02/13/13 10:32 02/14/13 14:38 290 4.7 Fluoranthene 24 ₽ 02/13/13 10:32 02/14/13 14:38 ug/Kg Fluorene 5.5 J 4.9 Ö 02/14/13 14:38 85 24 ug/Kg 02/13/13 10:32 Indeno[1,2,3-cd]pyrene 47 ug/Kg ☆ 02/13/13 10:32 02/14/13 14:38 1-Methylnaphthalene 15 J 47 8.4 ug/Kg 02/13/13 10:32 02/14/13 14:38 22 🔏 J 2-Methylnaphthalene 47 5.2 ug/Kg 02/13/13 10:32 02/14/13 14:38 18 J Naphthalene 9.5 02/13/13 10:32 02/14/13 14:38 Phenanthrene 110 4.6 ug/Kg 24 4.4 ug/Kg 02/13/13 10:32 02/14/13 14:38 Pyrene 240 %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 30 - 130 02/13/13 10:32 02/14/13 14:38

TestAmerica Savannah

70

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Client Sample ID: CV0748U-CS

Lab Sample ID: 680-87218-33 Matrix: Solid

Date Collected: 02/05/13 15:22 Date Received: 02/07/13 10:42

Percent Solids: 90.8



Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	29	J	110	22	ug/Kg	Ø	02/13/13 10:32	02/14/13 14:53	1
Acenaphthylene	15	J	44	5.5	ug/Kg	₩	02/13/13 10:32	02/14/13 14:53	1
Anthracene	61		9.2	4.6	ug/Kg	₩	02/13/13 10:32	02/14/13 14:53	1
Benzo[a]anthracene	240		8.8	4.3	ug/Kg	Þ	02/13/13 10:32	02/14/13 14:53	1
Вепzо[а]ругепе	150		11	5.7	ug/Kg	Þ	02/13/13 10:32	02/14/13 14:53	1
Benzo[b]fluoranthene	230		13	6.7	ug/Kg	₽	02/13/13 10:32	02/14/13 14:53	1
Benzo[g,h,i]perylene	130		22	4.8	ug/Kg	₩	02/13/13 10:32	02/14/13 14:53	1
Benzo[k]fluoranthene	69		8.8	4.0	ug/Kg	₩	02/13/13 10:32	02/14/13 14:53	1
Chrysene	180		9.9	4.9	ug/Kg	₽	02/13/13 10:32	02/14/13 14:53	1
Dibenz(a,h)anthracene	54		22	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 14:53	1
Fluoranthene	340		22	4.4	ug/Kg	尊	02/13/13 10:32	02/14/13 14:53	1
Fluorene	22		22	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 14:53	1
Indeno[1,2,3-cd]pyrene	120		22	7.8	ug/Kg	≎	02/13/13 10:32	02/14/13 14:53	1
1-Methylnaphthalene	41	J	44	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 14:53	1
2-Methylnaphthalene	61	J	44	7.8	ug/Kg	₽	02/13/13 10:32	02/14/13 14:53	1
Naphthalene	88		44	4.8	ug/Kg	尊	02/13/13 10:32	02/14/13 14:53	1
Phenanthrene	250		8.8	4.3	ug/Kg	₽	02/13/13 10:32	02/14/13 14:53	1
Pyrene	230		22	4.1	ug/Kg	₽	02/13/13 10:32	02/14/13 14:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78	-	30 - 130				02/13/13 10:32	02/14/13 14:53	

Client Sample ID: CV0748V-CS

Lab Sample ID: 680-87218-34

Date Collected: 02/05/13 15:30 Date Received: 02/07/13 10:42

Matrix: Solid Percent Solids: 78.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	130	Ū	130	25	ug/Kg	\$	02/13/13 10:32	02/14/13 15:08	1
Acenaphthylene	51	U	51	6.4	ug/Kg	₩.	02/13/13 10:32	02/14/13 15:08	1
Anthracene	8.9	J	11	5.3	ug/Kg	**	02/13/13 10:32	02/14/13 15:08	1
Benzo[a]anthracene	42		10	5.0	ug/Kg	₽	02/13/13 10:32	02/14/13 15:08	1
Benzo[a]pyrene	33		13	6.6	ug/Kg	#	02/13/13 10:32	02/14/13 15:08	1
Benzo[b]fluoranthene	41		16	7.8	ug/Kg	₩.	02/13/13 10:32	02/14/13 15:08	1
Benzo[g,h,i]perylene	30		25	5.6	ug/Kg	₩	02/13/13 10:32	02/14/13 15:08	1
Benzo[k]fluoranthene	22		10	4.6	ug/Kg	₽	02/13/13 10:32	02/14/13 15:08	1
Chrysene	34		11	5.7	ug/Kg	₽	02/13/13 10:32	02/14/13 15:08	1
Dibenz(a,h)anthracene	15	J	25	5.2	ug/Kg	\$	02/13/13 10:32	02/14/13 15:08	1
Fluoranthene	45		25	5.1	ug/Kg	₽	02/13/13 10:32	02/14/13 15:08	1
Fluorene	25	U	25	5.2	ug/Kg	₽	02/13/13 10:32	02/14/13 15:08	1
Indeno[1,2,3-cd]pyrene	33		25	9.0	ug/Kg	₽	02/13/13 10:32	02/14/13 15:08	i
1-Methylnaphthalene	8.1	J	51	5.6	ug/Kg	₽	02/13/13 10:32	02/14/13 15:08	1
2-Methylnaphthalene	12	∦ J	51	9.0	ug/Kg	₩	02/13/13 10:32	02/14/13 15:08	1
Naphthalene	11	J	51	5.6	ug/Kg	菜	02/13/13 10:32	02/14/13 15:08	1
Phenanthrene	28		10	5.0	ug/Kg	☼	02/13/13 10:32	02/14/13 15:08	1
Pyrene	41		25	4.7	ug/Kg	≎	02/13/13 10:32	02/14/13 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85	5 = 5	30 - 130				02/13/13 10:32	02/14/13 15:08	1















Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Client Sample ID: CV0439A-CS

Lab Sample ID: 680-87218-35

Date Collected: 02/05/13 12:30 Date Received: 02/07/13 10:42 Matrix: Solid Percent Solids: 87.6

olids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	110	U	110	23	ug/Kg	\$	02/13/13 10:32	02/14/13 15:24	1
Acenaphthylene	45	U	45	5.6	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Anthracene	9.5	U	9.5	4.7	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Benzo[a]anthracene	21		9.0	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Benzo[a]pyrene	12		12	5.9	ug/Kg	≎	02/13/13 10:32	02/14/13 15:24	1
Benzo[b]fluoranthene	18		14	6.9	ug/Kg	₩	02/13/13 10:32	02/14/13 15:24	1
Benzo[g,h,i]perylene	11	J	23	5.0	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Benzo[k]fluoranthene	7.3	J	9.0	4.1	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Chrysene	16		10	5.1	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Dibenz(a,h)anthracene	23	U	23	4.6	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Fluoranthene	20	J	23	4.5	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Fluorene	23	U	23	4.6	ug/Kg	☆	02/13/13 10:32	02/14/13 15:24	1
Indeno[1,2,3-cd]pyrene	9.9	J	23	8.0	ug/Kg	♥	02/13/13 10:32	02/14/13 15:24	1
1-Methylnaphthalene	12	J	45	5.0	ug/Kg	₩	02/13/13 10:32	02/14/13 15:24	1
2-Methylnaphthalene	35	∦ J	45	8.0	ug/Kg	₽	02/13/13 10:32	02/14/13 15:24	1
Naphthalene	31	J	45	5.0	ug/Kg	₿	02/13/13 10:32	02/14/13 15:24	1
Phenanthrene	18		9.0	4.4	ug/Kg	₩	02/13/13 10:32	02/14/13 15:24	1
Pyrene	20	J	23	4.2	ug/Kg	¢	02/13/13 10:32	02/14/13 15:24	1
Surrogate	%Recoverv	Qualifier	Limits				Prepared	Analyzed	Dil Fac

30 - 130

86

Client Sample ID: CV0439A-CSD

Lab Sample ID: 680-87218-36

02/13/13 10:32 02/14/13 15:24

Date Collected: 02/05/13 12:33 Date Received: 02/07/13 10:42

o-Terphenyl

Matrix: Solid Percent Solids: 86.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	110	U	110	23	ug/Kg	₩	02/13/13 10:32	02/14/13 15:39	1
Acenaphthylene	45	U	45	5.7	ug/Kg	₿	02/13/13 10:32	02/14/13 15:39	1
Anthracene	6.9	J	9.5	4.8	ug/Kg	\$	02/13/13 10:32	02/14/13 15:39	1
Benzo[a]anthracene	37		9.1	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 15:39	1
Benzo[a]pyrene	19		12	5.9	ug/Kg	算	02/13/13 10:32	02/14/13 15:39	1
Benzo[b]fluoranthene	29		14	6.9	ug/Kg	☆	02/13/13 10:32	02/14/13 15:39	1
Benzo[g,h,i]perylene	21	J	23	5.0	ug/Kg	₩	02/13/13 10:32	02/14/13 15:39	1
Benzo[k]fluoranthene	14	*	9.1	4.1	ug/Kg	\$	02/13/13 10:32	02/14/13 15:39	1
Chrysene	22		10	5.1	ug/Kg	₽	02/13/13 10:32	02/14/13 15:39	1
Dibenz(a,h)anthracene	6.0	J	23	4.7	ug/Kg	₽	02/13/13 10:32	02/14/13 15:39	1
Fluoranthene	42		23	4.5	ug/Kg	≎	02/13/13 10:32	02/14/13 15:39	1
Fluorene	23	U	23	4.7	ug/Kg	₩	02/13/13 10:32	02/14/13 15:39	1
Indeno[1,2,3-cd]pyrene	19	J	23	8.1	ug/Kg	Þ	02/13/13 10:32	02/14/13 15:39	1
1-Methylnaphthalene	14	J	45	5.0	ug/Kg	₽	02/13/13 10:32	02/14/13 15:39	1
2-Methylnaphthalene	32	∦ J	45	8.1	ug/Kg	₽	02/13/13 10:32	02/14/13 15:39	1
Naphthalene	27	J	45	5.0	ug/Kg	章	02/13/13 10:32	02/14/13 15:39	1
Phenanthrene	33		9.1	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 15:39	1
Pyrene	38		23	4.2	ug/Kg	₽	02/13/13 10:32	02/14/13 15:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	83	-	30 - 130				02/13/13 10:32	02/14/13 15:39	1

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Client Sample ID: CV0439B-CS

Date Collected: 02/05/13 12:37 Date Received: 02/07/13 10:42

Lab Sample ID: 680-87218-37

Matrix: Solid

Percent Solids: 87.2

Analyte	Result	Qualifler	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	120	Ü	120	23	ug/Kg	##	02/13/13 10:32	02/14/13 15:54	1
Acenaphthylene	11	J	46	5.8	ug/Kg	**	02/13/13 10:32	02/14/13 15:54	1
Anthracene	18		9.7	4.8	ug/Kg	⋫	02/13/13 10:32	02/14/13 15:54	1
Benzo[a]anthracene	67		9.2	4.5	ug/Kg	≎	02/13/13 10:32	02/14/13 15:54	1
Benzo[a]pyrene	73		12	6.0	ug/Kg	₩	02/13/13 10:32	02/14/13 15:54	1
Benzo[b]fluoranthene	120		14	7.0	ug/Kg	₽	02/13/13 10:32	02/14/13 15:54	1
Benzo[g,h,i]perylene	110		23	5.1	ug/Kg	₩	02/13/13 10:32	02/14/13 15:54	1
Benzo[k]fluoranthene	67		9.2	4.2	ug/Kg	₩	02/13/13 10:32	02/14/13 15:54	1
Chrysene	110		10	5.2	ug/Kg	≎	02/13/13 10:32	02/14/13 15:54	1
Dibenz(a,h)anthracene	46		23	4.7	ug/Kg	≎	02/13/13 10:32	02/14/13 15:54	1
Fluoranthene	100		23	4.6	ug/Kg	\$	02/13/13 10:32	02/14/13 15:54	1
Fluorene	9.2	J	23	4.7	ug/Kg	≎	02/13/13 10:32	02/14/13 15:54	.1
Indeno[1,2,3-cd]pyrene	68		23	8.2	ug/Kg	₩	02/13/13 10:32	02/14/13 15:54	1
1-Methylnaphthalene	28	J	46	5.1	ug/Kg	Þ	02/13/13 10:32	02/14/13 15:54	1
2-Methylnaphthalene	54	J	46	8.2	ug/Kg	₩	02/13/13 10:32	02/14/13 15:54	1
Naphthalene	64		46	5.1	ug/Kg	₩	02/13/13 10:32	02/14/13 15:54	1
Phenanthrene	88		9.2	4.5	ug/Kg	₩	02/13/13 10:32	02/14/13 15:54	1
Pyrene	43		23	4.3	ug/Kg	❖	02/13/13 10:32	02/14/13 15:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

30 - 130

61

Client Sample ID: CV0467A-CS

Date Collected: 02/05/13 14:14

o-Terphenyl

Date Received: 02/07/13 10:42

Lab Sample ID: 680-87218-38

02/13/13 10:32 02/14/13 15:54

Matrix: Solid

Percent Solids: 78.9

Analyte	Result	Qualifler	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	130	U	130	25	ug/Kg	₿	02/13/13 10:32	02/14/13 16:09	1
Acenaphthylene	19	J	51	6.3	ug/Kg	\$	02/13/13 10:32	02/14/13 16:09	1
Anthracene	30		11	5.3	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
Benzo[a]anthracene	92		10	4.9	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
Benzo[a]pyrene	70		13	6.6	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
Benzo[b]fluoranthene	95		15	7.7	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
Benzo[g,h,i]perylene	75		25	5.6	ug/Kg	₩	02/13/13 10:32	02/14/13 16:09	1
Benzo[k]fluoranthene	52		10	4.6	ug/Kg	☆	02/13/13 10:32	02/14/13 16:09	1
Chrysene	100		11	5.7	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
Dibenz(a,h)anthracene	27		25	5.2	ug/Kg	\$	02/13/13 10:32	02/14/13 16:09	1
Fluoranthene	120		25	5.1	ug/Kg	##	02/13/13 10:32	02/14/13 16:09	1
Fluorene	5.6	J	25	5.2	ug/Kg	\$	02/13/13 10:32	02/14/13 16:09	1
Indeno[1,2,3-cd]pyrene	67		25	9.0	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
1-Methylnaphthalene	23	J	51	5.6	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
2-Methylnaphthalene	23	ХJ	51	9.0	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
Naphthalene	23	J	51	5.6	ug/Kg	₩	02/13/13 10:32	02/14/13 16:09	1
Phenanthrene	74		10	4.9	ug/Kg	₽	02/13/13 10:32	02/14/13 16:09	1
Pyrene	75		25	4.7	ug/Kg	₩	02/13/13 10:32	02/14/13 16:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	71		30 - 130				02/13/13 10:32	02/14/13 16:09	1



Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-2

SDG: 68087218-2

Client Sample ID: CV0673A-CS

Date Received: 02/07/13 10:42

Date Collected: 02/05/13 13:18

Lab Sample ID: 680-87218-39

Matrix: Solid

Percent Solids: 73.1

	7	
	4	
	×	
- 11		

Analyte	Result	Qualifler	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Acenaphthene	130	U	130	27	ug/Kg	₩	02/13/13 10:32	02/14/13 16:24	- 1
Acenaphthylene	8.7	J	54	6.7	ug/Kg	₩	02/13/13 10:32	02/14/13 16:24	1
Anthracene	15		11	5.7	ug/Kg	₩	02/13/13 10:32	02/14/13 16:24	4
Benzo[a]anthracene	36		11	5.2	ug/Kg	₩	02/13/13 10:32	02/14/13 16:24	1
Benzo[a]pyrene	27		14	7.0	ug/Kg	₩	02/13/13 10:32	02/14/13 16:24	1
Benzo[b]fluoranthene	51		16	8.2	ug/Kg	₩	02/13/13 10:32	02/14/13 16:24	1
Benzo[g,h,i]perylene	38		27	5.9	ug/Kg	Þ	02/13/13 10:32	02/14/13 16:24	1
Benzo[k]fluoranthene	15		11	4.8	ug/Kg	-	02/13/13 10:32	02/14/13 16:24	1
Chrysene	61		12	6.1	ug/Kg	₽	02/13/13 10:32	02/14/13 16:24	-1
Dibenz(a,h)anthracene	14	J	27	5.5	ug/Kg	₩	02/13/13 10:32	02/14/13 16:24	1
Fluoranthene	43		27	5.4	ug/Kg	#	02/13/13 10:32	02/14/13 16:24	1
Fluorene	27	U	27	5.5	ug/Kg	₽	02/13/13 10:32	02/14/13 16:24	1
Indeno[1,2,3-cd]pyrene	24	J	27	9.6	ug/Kg	亞	02/13/13 10:32	02/14/13 16:24	1
1-Methylnaphthalene	23	J	54	5.9	ug/Kg	尊	02/13/13 10:32	02/14/13 16:24	1
2-Methylnaphthalene	34	∦ J	54	9.6	ug/Kg	₽	02/13/13 10:32	02/14/13 16:24	1
Naphthalene	34	J	54	5.9	ug/Kg	₩	02/13/13 10:32	02/14/13 16:24	1
Phenanthrene	48		11	5.2	ug/Kg	☆	02/13/13 10:32	02/14/13 16:24	1
Pyrene	42		27	5.0	ug/Kg	₽	02/13/13 10:32	02/14/13 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DII Fac
o-Terphenyl	80		30 - 130				02/13/13 10:32	02/14/13 16:24	1

Client Sample ID: CV0673B-CS

Date Collected: 02/05/13 13:23

Date Received: 02/07/13 10:42

Lab Sample ID: 680-87218-40

Matrix: Solid Percent Solids: 83.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	₩	02/13/13 10:32	02/14/13 16:39	1
Acenaphthylene	47	U	47	5.9	ug/Kg	₿	02/13/13 10:32	02/14/13 16:39	1
Anthracene	7.3	J	9.9	5.0	ug/Kg	₽	02/13/13 10:32	02/14/13 16:39	1
Benzo[a]anthraceпe	30		9.4	4.6	ug/Kg	₩	02/13/13 10:32	02/14/13 16:39	1
Benzo[a]pyrene	15		12	6.1	ug/Kg	₩	02/13/13 10:32	02/14/13 16:39	1
Benzo[b]fluoranthene	23		14	7.2	ug/Kg	₽	02/13/13 10:32	02/14/13 16:39	1
Benzo[g,h,i]perylene	18	J	24	5.2	ug/Kg	₽	02/13/13 10:32	02/14/13 16:39	1
Benzo[k]fluoranthene	8.9	J	9.4	4.2	ug/Kg	₩	02/13/13 10:32	02/14/13 16:39	1
Chrysene	29		11	5.3	ug/Kg	\$	02/13/13 10:32	02/14/13 16:39	1
Dibenz(a,h)anthracene	14	J	24	4.8	ug/Kg	₽	02/13/13 10:32	02/14/13 16:39	1
Fluoranthene	22	J	24	4.7	ug/Kg	₩	02/13/13 10:32	02/14/13 16:39	1
Fluorene	24	U	24	4.8	ug/Kg	Þ	02/13/13 10:32	02/14/13 16:39	1
Indeno[1,2,3-cd]pyrene	15	J	24	8.4	ug/Kg	☆	02/13/13 10:32	02/14/13 16:39	1
1-Methylnaphthalene	19	J	47	5.2	ug/Kg	₩	02/13/13 10:32	02/14/13 16:39	1
2-Methylnaphthalene	25	X J	47	8.4	ug/Kg	₩	02/13/13 10:32	02/14/13 16:39	1
Naphthalene	23	J	47	5.2	ug/Kg	≎	02/13/13 10:32	02/14/13 16:39	1
Phenanthrene	31		9.4	4.6	ug/Kg	₩	02/13/13 10:32	02/14/13 16:39	1
Pyrene	23	J	24	4.4	ug/Kg	₽	02/13/13 10:32	02/14/13 16:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	77	-	30 - 130				02/13/13 10:32	02/14/13 16:39	1